

A decorative graphic on the left side of the slide, consisting of a network of white lines and small circles on a dark blue background, resembling a circuit board or a stylized tree structure.

NULKI-TACHICK LAKES STEWARDSHIP SOCIETY INITIATIVE

SUNRISE JUNE 2018





Summary of Lake

Surface area:	1,657 Hectares	(4,094 Acres)
Mean depth:	4.4 metres	(14 feet)
Maximum depth:	7.6 metres	(25 feet)
Elevation:	720 metres	(2,362 feet)

Fish Stocking Data

Species	Date Released	# of Fish
Rainbow Trout	25-Jun-01	10,000
Rainbow Trout	1-Jun-00	10,000
Rainbow Trout	31-May-99	10,000
Rainbow Trout	17-Jun-98	10,000
Rainbow Trout	3-Jun-97	10,000
Rainbow Trout	12-Jun-96	10,000
Rainbow Trout	7-Jun-95	8,000
Rainbow Trout	30-May-95	2,000
Rainbow Trout	26-May-94	5,000
Rainbow Trout	1-Jun-85	10,000
Rainbow Trout	1-Jun-84	10,000
Rainbow Trout	1-Jun-83	30,000
Rainbow Trout	1-Jun-82	30,000
Rainbow Trout	1-Jan-72	5,000

Fish Species Captured during surveys

sport fish	non-sport fish
Kokanee	Bridgelip Sucker
Mountain Whitefish	Largescale Sucker
Rainbow Trout	Longnose Sucker
	Northern Squawfish
	Pearmouth Chub
	Prickly Sculpin
	Redside Shiner

Fish data collected in 1953, 1959 & 1968.
Please note that list may not show all
species present in lake

ACCESS MAP

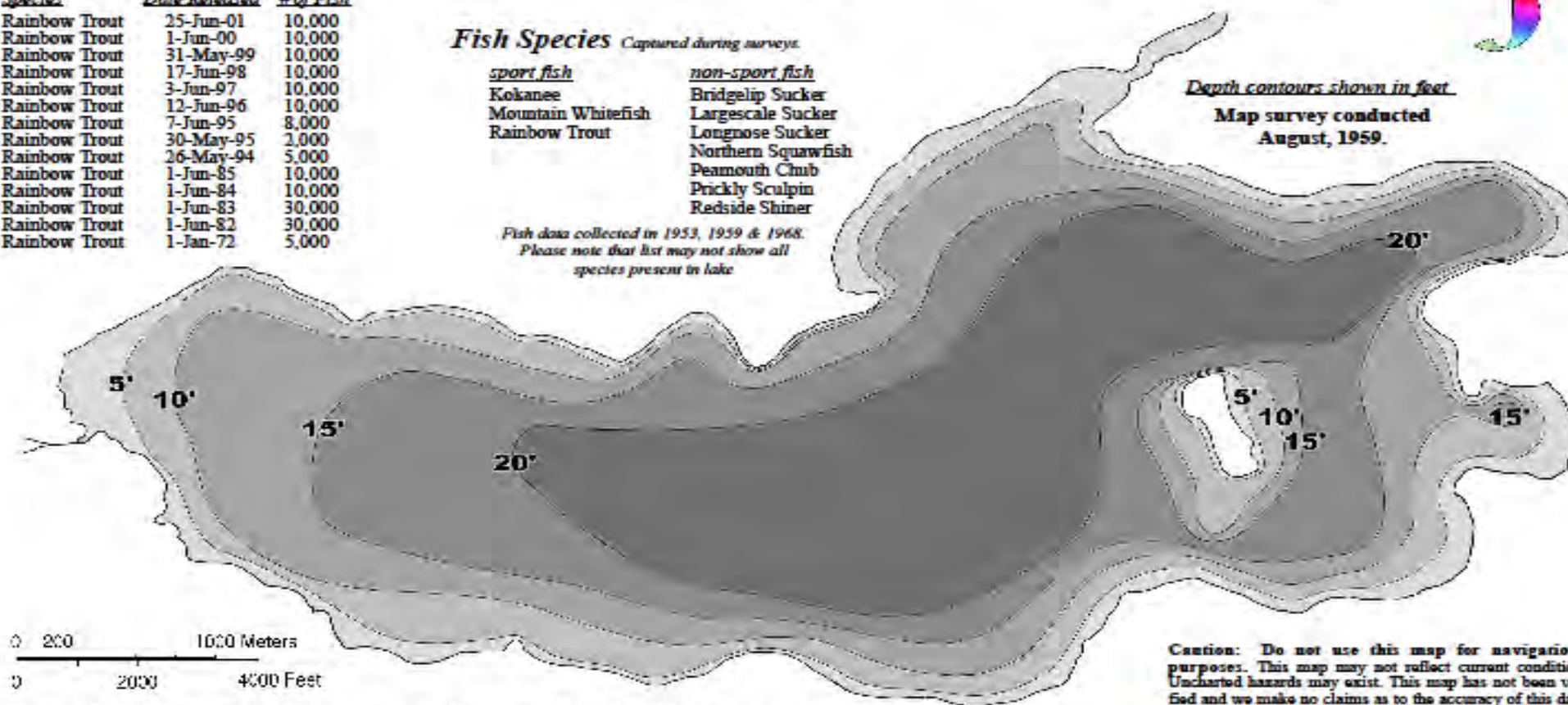
Our atlas also contains an
access map to Nulki Lake. To
get this map, visit the web site
and peruse the Vanderhoof
map series.

N



Depth contours shown in feet

Map survey conducted
August, 1959.



Caution: Do not use this map for navigational
purposes. This map may not reflect current conditions.
Uncharted hazards may exist. This map has not been ver-
ified and we make no claims as to the accuracy of this data.
Base Map © Province of British Columbia

The Angler's Atlas server is hosted by Borealis Internet and bcinterior.com

Nulki Lake depth chart, published May, 2002.

www.AnglersAtlas.com



Summary of Lake

Surface area: 2,208 Hectares (5,456 Acres)
Mean depth: 4.4 metres (14 feet)
Maximum depth: 7.6 metres (25 feet)

Elevation = 710 metres (2,329 feet)

Fish Species Captured during surveys

sport fish

Rainbow Trout

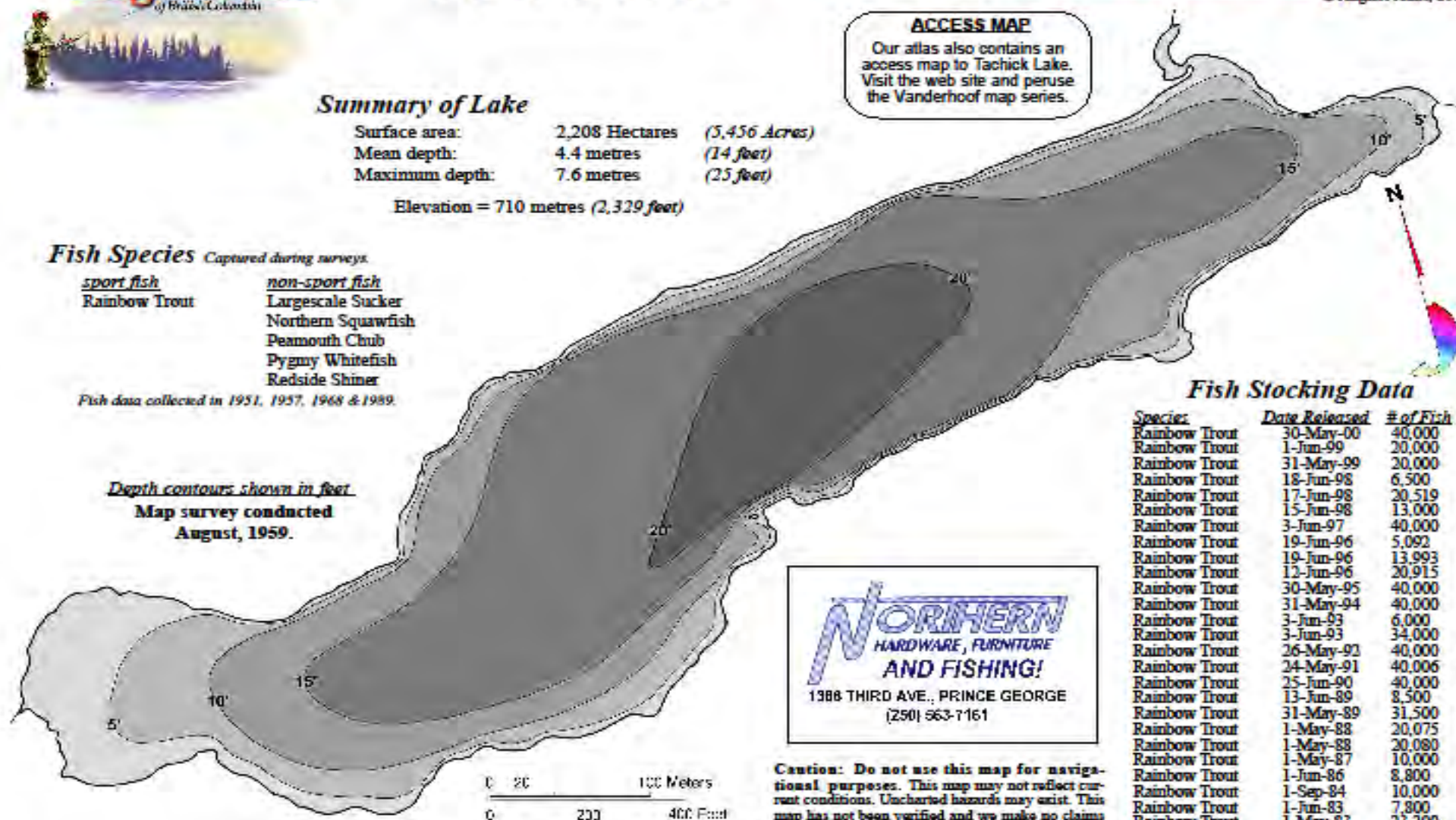
non-sport fish

Largescale Sucker
Northern Squawfish
Peamouth Chub
Pygmy Whitefish
Redside Shiner

Fish data collected in 1951, 1957, 1968 & 1989.

Depth contours shown in feet

Map survey conducted
August, 1959.



ACCESS MAP

Our atlas also contains an access map to Tachick Lake. Visit the web site and peruse the Vanderhoof map series.

Fish Stocking Data

Species	Date Released	# of Fish
Rainbow Trout	30-May-00	40,000
Rainbow Trout	1-Jun-99	20,000
Rainbow Trout	31-May-99	20,000
Rainbow Trout	18-Jun-98	6,500
Rainbow Trout	17-Jun-98	20,519
Rainbow Trout	15-Jun-98	13,000
Rainbow Trout	3-Jun-97	40,000
Rainbow Trout	19-Jun-96	5,092
Rainbow Trout	19-Jun-96	13,993
Rainbow Trout	12-Jun-96	20,915
Rainbow Trout	30-May-95	40,000
Rainbow Trout	31-May-94	40,000
Rainbow Trout	3-Jun-93	6,000
Rainbow Trout	3-Jun-93	34,000
Rainbow Trout	26-May-92	40,000
Rainbow Trout	24-May-91	40,006
Rainbow Trout	25-Jun-90	40,000
Rainbow Trout	13-Jun-89	8,500
Rainbow Trout	31-May-89	31,500
Rainbow Trout	1-May-88	20,075
Rainbow Trout	1-May-88	20,080
Rainbow Trout	1-May-87	10,000
Rainbow Trout	1-Jun-86	8,800
Rainbow Trout	1-Sep-84	10,000
Rainbow Trout	1-Jun-83	7,800
Rainbow Trout	1-May-83	23,200
Rainbow Trout	1-Jun-81	30,000
Rainbow Trout	1-Jan-72	5,000

NORTHERN
HARDWARE, FURNITURE
AND FISHING!

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Base Map © Province of British Columbia.

The Angler's Atlas server is hosted by Borealis Internet and bcinterior.com

Tachick Lake depth chart, published May, 2001.

www.AnglersAtlas.com

BACKGROUND

- Over the past 80 years, the Nechako Plateau has experienced significant development
- Building of the Kenny Dam and multiple roads led to increased access, timber harvesting, farming, ranching, and mining. Draining of wetlands and destruction of riparian areas occurred in lakes and streams. Clearing of land to build homesites with septic fields increased exponentially on both lakes.
- Impacts of these activities has led to decreased water quality, accelerated macrophyte and algae growth, including dangerously toxic cyanobacteria. Heavy weed and algae growth impedes lake access to safely launch boats, and over time, causes damage to marine engines.
- Depleted lake oxygen levels and increased cyanobacteria have impacted the health of aquatic species, killing both fish and mollusks and even caused the death of cattle from drinking the water.

NTLSS INITIATIVE GOALS – PHASE ONE

Completion of a Macrophyte Harvest Feasibility Study to achieve:

- Approvals and permissions from Saik'uz First Nations and Government permitting agencies
- A reduction in phosphorus fed macrophyte growth, via controlled harvesting, while respecting the areas of seasonal activity, such as spawning grounds and migratory bird habitat
- Control of blue-green algae (cyanobacteria)
- Advocacy for inclusive water use planning with clarification of the difference between “harvesting” and “removal” of macrophytes
- Development of an ongoing evaluation strategy

ALGAE GROWTH MIDDLE OF LAKE



CYANOBACTERIA ROLLING IN WITH WAVE ACTION



CYANOBACTERIA ON THE SHORELINE



CYANOBACTERIA IN THE WEEDS



SHORELINE VIEW OF EARLY FORMING MASS



SHORELINE IN FRONT OF HOME WITH ODOUR



ALGAE MASS CREATES ENGINE PROBLEMS!



MACROPHYTE HARVEST FIELD STUDY AUGUST 2023

EDI WITH THE SUPPORT OF SAIK'UZ FIRST NATIONS



Memorandum



To: Ray Klingsporn, NTISS
From: Jerry Grant
Date: October 20, 2023
Project No: 22P0125
Re: Nulki-Tachick Lakes Macrophyte Harvesting Feasibility Study Project Update

The following table indicates the progress toward completion of the Nulki Tachick Lakes Macrophyte Harvesting Feasibility Study as of October 20, 2023.

Phase	Task	Completed	To do
1. Formalizing agreements and assessing support	Reach out to Saik'uz FN and assess support.	Support of Saik'uz, SHRNbc and UTCCA has been confirmed	Obtain permission to use UTCCA data from Saik'uz Nation
2. Field assessments and elemental composition of dominant macrophyte species	Solidify methodology of macrophyte sampling	General study plan was designed ArcGIS field maps were generated by EDI GIS team Plant sampling methodology was determined	N/A
	Perform sampling	Field work was completed August 28-September 1	N/A
	Lab Analysis	44 Macrophyte samples were submitted to ALS labs for analyses	Laboratory results expected November 3, 2023
	Data entry	Field data has been documented on field cards	Enter field data into spreadsheets for analysis



3. Macrophyte harvesting program feasibility study	Macrophyte and nutrient removal estimation	Working with LDI GIS team to model macrophyte harvest results	Complete harvest modeling exercise
	Determine macrophyte disposal options	Literature review complete Consulted with Tabor Lake Cleanup Society	Discuss macrophyte disposal with RDBN, Sais'uz Nation, etc.
	Provide lake monitoring plan recommendations	Discussed using existing VLMP data plus Secchi depth	Complete ongoing monitoring plan
	Literature review	Literature review complete	N/A
4. Regulatory permitting support	Facilitate permitting process	FLNRORD has been consulted regarding permitting process. Preparing memo for DFO on Fisheries Act Authorization	Continue to discuss permitting requirements with regulators

Following is the timeline to complete the project:

Phase	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
PHASE 2 (Nulki-Tachick Lakes Field Assessments)					X			
PHASE 3 (Macrophyte Harvesting Program Feasibility Study including Recommendations for Program Evaluation)	X	X	X	X	X	X	X	X
PHASE 4 (Regulatory Permitting Support)	X	X	X	X	X	X	X	X*

* Continue as necessary

NTLSS INITIATIVE GOALS – PHASE TWO

Continued collaboration with Saik'uz First Nation and, Ministry of Environment Aquatic Stewardship and Climate Change Strategy to:

- Reach consensus on effective and efficient harvesting equipment
- Secure annualized funding through advocacy with potential funders
- Decide on collection points, disposal and recycling of harvested materials
- Explore alternative strategies for phosphorus reduction, such as a trial use of zeolites/clay cairns at inflows to both lakes